

Title (en)  
PNPN SWITCH DEVICE

Publication  
**EP 0164106 B1 19890913 (EN)**

Application  
**EP 85106927 A 19850604**

Priority  
• JP 11490984 A 19840605  
• JP 27326184 A 19841226

Abstract (en)  
[origin: EP0164106A2] A PNPN switch device with a circuit for preventing an error due to a surge voltage. The circuit comprises two capacitors (23a), (24a). The first capacitor (24a) is formed in a P-type gate region (13a). The second capacitor of a capacitance of an insulation layer (32) sandwiched between a MOS gate electrode (22a) and a capacitor electrode (52a) is provided outside the P-type gate region (13a).

IPC 1-7  
**H01L 23/56; H01L 27/06**

IPC 8 full level  
**H01L 23/522** (2006.01); **H01L 27/02** (2006.01); **H01L 27/06** (2006.01); **H01L 29/74** (2006.01); **H01L 29/747** (2006.01); **H01L 31/111** (2006.01)

CPC (source: EP US)  
**H01L 23/5222** (2013.01 - EP US); **H01L 27/0248** (2013.01 - EP US); **H01L 27/0617** (2013.01 - EP US); **H01L 29/7408** (2013.01 - EP US); **H01L 29/742** (2013.01 - EP US); **H01L 29/747** (2013.01 - EP US); **H01L 31/1113** (2013.01 - EP US); **H01L 2924/0002** (2013.01 - EP US)

Cited by  
EP0230154A3; FR2651604A1; FR2819102A1; EP0594111A1; US5436486A; WO02054496A1

Designated contracting state (EPC)  
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